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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/849,181

05/05/2001

Richard W. Tock

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34453

7590

07/20/2009

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EXAMINER

VARGOT, MATHIEU D

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

07/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/849,181	<b>Applicant(s)</b> TOCK ET AL.	
	<b>Examiner</b> Mathieu D. Vargot	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayha (see the Abstract; col. 1, lines 25-45 in the background art; col. 2, lines 45-53 concerning the film formation; col. 4, lines 50-55) in view of Cournoyer et al (see col. 2, lines 4-10) and further in view of Thrash (see col. 7, lines 27-39).

Bayha discloses molding thermoset plastic articles by curing a polyester/styrene containing resin and employing a polymeric additive that reduces the emission of volatile monomers, or VOCs, upon curing the resin. Essentially, the primary reference fails to teach using a cellulosic material to reduce the emissions of the VOCs. Cournoyer et al (col. 2, lines 4-10) teaches that it is known in the art to remove volatile organics from contaminated gases by passing the gases through ground-up cellulosic waste, the cellulosic waste absorbing the volatiles. It is submitted that one of ordinary skill in the art would realize that cellulosic material would have VOC adsorption capabilities as taught in Cournoyer et al and that such a material would have been an obvious addition to the resin system of the primary reference to further ensure that VOCs are trapped. In other words, it would have been obvious to have employed the cellulosic material of Cournoyer et al in addition to the polymeric additive of Bayha to facilitate VOC emission reduction. If cellulose traps VOCs in contaminated gases, it

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would also be expected to do the same in a polymeric resin system that is being cured and emitting contaminated gases. Thrash is being additionally applied to show that it is well known in the art to incorporate cellulosic plant waste as a reinforcing filler in thermoset plastics and provides additional motivation for the combination. One of ordinary skill in the art would have been led to employ cellulosic material in the process of the primary reference to provide a reinforced composite as generally taught in Thrash. The exact amount of lignin in the cellulosic material—and its absorption to the cellulosic material-- would have been readily determined through routine experimentation to achieve the desired reduction. Bayha discloses (col. 2, lines 45-53) that the polymeric additive forms a film over the article and film formation involving the cellulosic material of Cournoyer et al would have been obvious in the combination as applied. Bayha adds the VOC emission reduction additive prior to curing the resin and it is submitted that the exact time of addition would have been obvious as long as the additive is employed prior to the onset of curing. The background art of Bayha at col. 1, lines 25-45 teaches that other methods previously used to reduce VOC emissions involved a faster resin cure—ie, accelerating the curing of the resin—and employing UV light—ie, limiting the temperature of the curing—and it is submitted that these aspects as set forth in instant claims 12-14 would have also been obvious modifications to the curing of Bayha given their known results. It is within the skill level of the art to employ well known steps to achieve any well known benefits accorded thereby. The exact size of the cellulosic material would have been obvious dependent on the extent of loading

and mixing used prior to the curing. See also Thrash, the passage bridging columns 5 and 6, wherein suitable granulate sizes are disclosed for the ground-up cellulosic waste.

2. Upon updating the search, new art has been found which requires a reopening of the prosecution of the case. Hence, the indication of allowability concerning claims 7-14 and 16-20 has been rescinded.

3. Conner et al teaches that an incinerated cellulosic material—rice hull ash—effectively removes VOCs in wastes and soils and that the porosity of the rice hull material may explain the ability of the ash material to immobilize—ie, adsorb—the volatiles—see col. 3, lines 23-30.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on 571 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot  
July 16, 2009

/Mathieu D. Vargot/  
Primary Examiner, Art Unit 1791